



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,939	06/22/2001	Christopher J. Marxen	2001P11061US	7697

7590 12/01/2005
JOEL MILLER, ESQ.
17 WESTWOOD DRIVE SOUTH
WEST ORANGE, NJ 07502

EXAMINER

NI, SUHAN

ART UNIT	PAPER NUMBER
----------	--------------

2646

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/887,939	Applicant(s) MARXEN ET AL.	
	Examiner Suhan Ni	Art Unit 2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/11/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the appeal brief filed on 05/11/2005, PROSECUTION IS HEREBY REOPENED.

The finality of the office action is withdrawn and a new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. This communication is responsive to the amendment dated 08/23/2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 3-14, 17 and 19-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Topholm (U. S. Pat. - 6,879,697).

Regarding claims 1, 17 and 28, Topholm discloses an apparatus and methods for fabricating the shell for an in-the-ear hearing instrument comprising at least one component or structural feature (Fig. 3), comprising: a scanner (A) for obtaining a digital representation (13) of a portion of the ear canal (12) and optionally a portion of the outer ear (11), and a processor (B-C) for creating a digital representation (16) of the shell that conforms to the scanned digital representation (13) of the ear canal and the outer ear as applicable, wherein the processor comprises: means (B) for creating a digital representation (14) of the shell; and means (C) for adjusting the fit of the digital representation of the outer surface of the shell in the digital representation of the ear canal (col. 7, lines 43-46 and 58-63) as claimed.

Regarding claims 3-6, 13-14, 19-20, 22-23 and 25-26, Topholm et al. further disclose the apparatus for fabricating a shell for an ITE type hearing device, wherein means for adjusting the fit of the outer surface of the shell comprises means for modifying at least one physical dimension of the digital representation of the outer surface of the shell (col. 7, line 58 to col. 8, line 7) as claimed.

Regarding claim 7, Topholm further discloses the apparatus and methods for fabricating the shell for an in-the-ear hearing instrument, wherein creating a digital representation of the shell comprises creating a faceplate (2) integral with the shell.

Regarding claims 8-11, 24 and 27 Topholm further discloses the apparatus and methods for fabricating the shell for an in-the-ear hearing instrument, wherein further includes positioning (C) one or more components or structural features (15) in or on the shell (14) as claimed.

Regarding claims 12 and 21, Topholm et al. further disclose the apparatus for fabricating a shell for an ITE type-hearing device by direct manufacture (D).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Topholm (U. S. Pat. - 6,879,697).

Regarding claims 2 and 18, Topholm does not clearly teach of reducing the number of points, or pixels/voxels as claimed. Since reducing image resolutions or efficiently and effectively selecting a suitable resolution for image processing is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide or set reasonably reduced number of pixels for any port of the image processing, especially in 3-D data formation, rendering, reconstruction, and displaying, in order to effectively and efficiently obtain and process the imaging data for further manufacturing the hearing device.

Regarding claims 15, Topholm does not clearly teach for applying an identifier to the shell as claimed. Since providing an identifier for a hearing aid housing is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide suitable identifiers, such as manufacture logo, and/or serial numbers, for the hearing aid shell, in order to effectively and efficiently process and manage the hearing aid.

Response to Amendment

5. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any response to this final action should be mailed to:

**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**

or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE"), or

(703) 305-9508, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(571)-272-7505**, and the

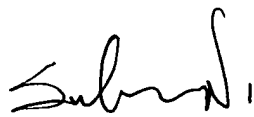
Art Unit: 2646

number for fax machine is **(571)-273-7505**. The examiner can normally be reached on Monday through Thursday from 10:00 am to 8:00 pm. If it is necessary, the examiner's supervisor, **Sinh N. Tran**, can be reached at **(571)-272-7564**.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(703) 305-3900**.

November 28, 2005


SUHAN NI
PRIMARY EXAMINER